

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application. Please cancel original claims 1-16, and add new claims 17-32 as follows:

Claims 1-16. (Cancelled)

17. A headlight for a vehicle, having
- a reflector having a focal point,
 - a light source in the area of the focal point of the reflector, and
- a transparent lens,
- wherein the light source is a semiconductor light source which emits infrared radiation, and
- wherein a cooling element is provided which is thermally connected to the light source, extends from the light source to the lens and projects into the lens or passes through it.
18. A headlight according to Claim 17, wherein the cooling element extends along the center axis of the reflector.
19. A headlight according to Claim 17, wherein the cooling element has an element in the form of a rod.
20. A headlight according to Claim 17, wherein the cooling element has one or more essentially flat elements.

21. A headlight according to Claim 20, wherein one or more flat elements are arranged running radially from the center axis.

22. A headlight according to Claim 21, wherein two or more radially running flat elements are provided, and are arranged rotationally symmetrically about the center axis.

23. A headlight according to Claim 21, wherein 3, 4 or 5 radially running flat elements are provided and are arranged in the form of a star.

24. Headlight according to Claim 17, wherein the cooling element is designed to be partially or completely mirrored.

25. A headlight according to Claim 17, wherein the cooling element is composed of metal, in particular aluminium, copper, silver, iron or an alloy using such metals.

26. A headlight according to Claim 17, wherein the cooling element is sealed from the lens by means of an elastic, in particular permanently elastic, sealing agent, in particular composed of silicone rubber.

27. A headlight according to Claim 17, wherein the cooling element is not the same color as the reflector.

28. A headlight according to Claim 17, wherein the cooling element does not project, or projects only insignificantly, beyond the lens.

29. A headlight according to Claim 28, wherein a flat heat sink, in particular in the form of a disc, is arranged on the side of the lens which faces away from the light source and is thermally connected to the cooling element.

30. A headlight according to Claim 17, wherein the light source represents an array comprising two or more individual light sources, which is arranged on a mount and whose mount is thermally conductively connected to the cooling element.

31. A headlight according to Claim 20, wherein two or more flat elements are mechanically connected to the reflector.

32. A headlight according to Claim 17, wherein the power supply for the light source is provided via the cooling element.